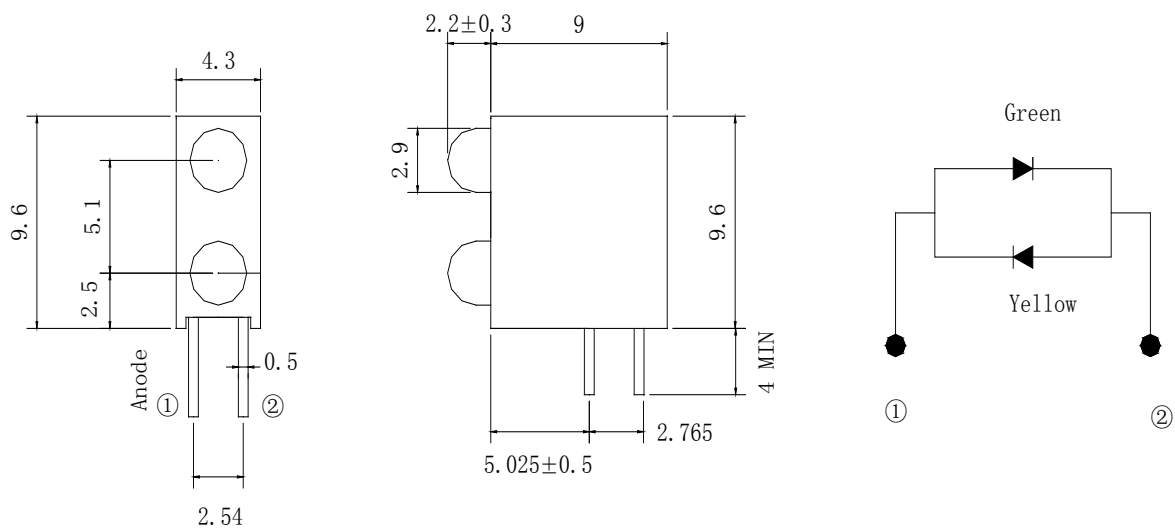


**Features**

- 3mm Round Type LED Assembly
- Low Power Consumption
- High Efficiency
- Various Colors and Viewing Angle
- Long Solid State Reliability
- Package: 1000pcs/Packing

**Applications**

- Indicator

**Package Dimensions****Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2$ mm (.0079") unless otherwise noted.
3. Specifications are subject to change without notice
4. This drawing is only for indication, not as a basis for the actual structure.



**Selection Guide**

Part No	Lens Type	Dice	Emitted Color
FDA-35212GY-TWD1-D4.0	White Diffused	GaAsP/GaP Gap	Yellow Green

**Electrical / Optical Characteristics At Ta=25 °C**

Symbol	Parameter		Green	Yellow	Unit	Test Condition
Iv	Luminous Intensity	MIN.	1	1	mcd	IF=10mA
		TYP.	2	2		
		MAX.				
2θ1/2	Viewing Angle	TYP.	90	90	deg	IF=10mA
λ Peak	Peak Emission Wavelength	TYP.	565	585	nm	IF=10mA
λ d	Dominant Wavelength	TYP.	570	590	nm	IF=10mA
Δλ	Spectral Line Half-Width	TYP.	30	35	nm	IF=10mA
VF	Forward Voltage	MIN.			V	IF=10mA
		TYP.	2.1	2.0		
		MAX.	2.4	2.4		
IR	Reverse Current	MAX.	10	10	μ A	VR=5V

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 optical centerline value

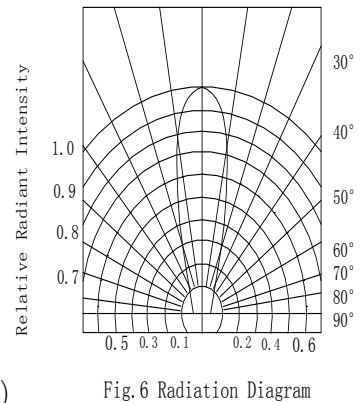
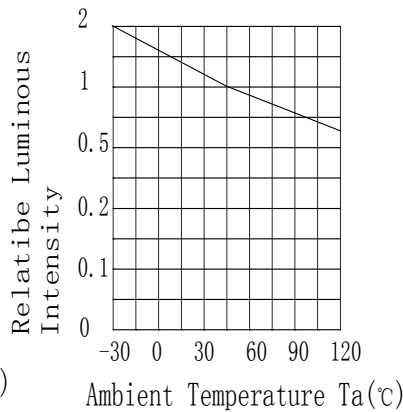
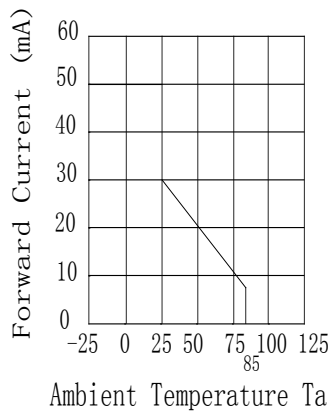
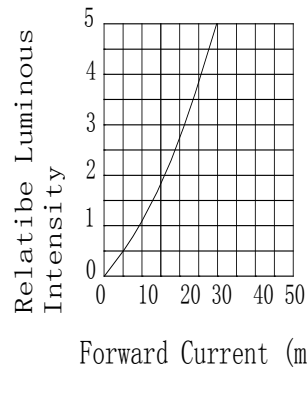
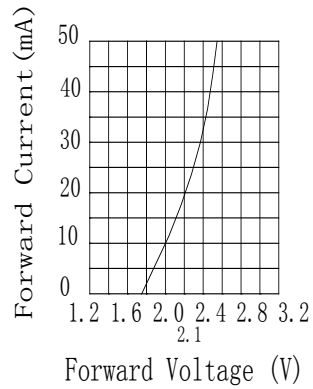
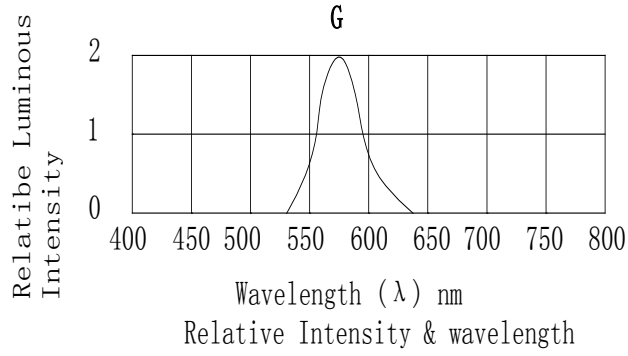
**Absolute Maximum Ratings At Ta=25°C**

Parameter	Green	Yellow	Unit
Power Dissipation	100	85	mW
Peak Forward Current[1]	100	100	mA
Continuous Forward Current	30	25	mA
Reverse Voltage	5	5	V
Operating Temperature Range	-45°C to + 85°C		
Storage Temperature Range	-55°C to + 105°C		
Soldering Condition	260°C For 5 Seconds		

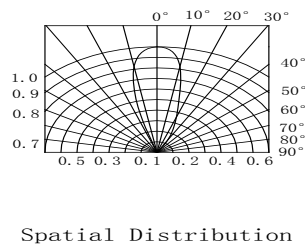
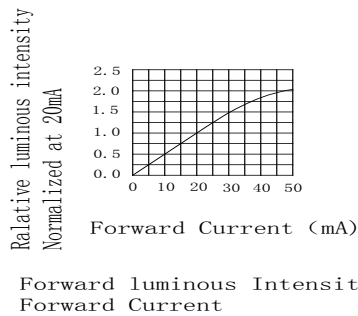
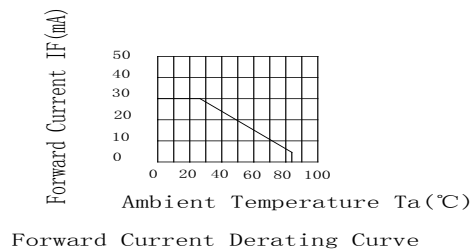
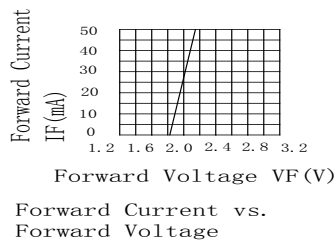
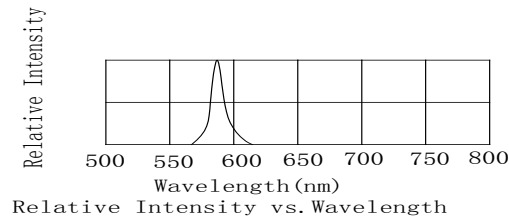
Note:

1. 1/10DutyCycle, 0.1msPulseWidth

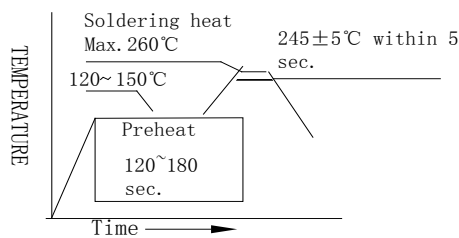
**Electrical Optical Characteristics Curves At Ta=25 °C**



**Electrical Optical Characteristics Curves At Ta=25 °C**



**Reflow Soldering Instructions**



Notes:

1. The LEDs should be used within a year.
2. The LEDs should be kept in 5~30°C and 60% RH for less.
3. The LEDs should be used within 24 hours, or else should be kept a 5~30°C and 30% RH or less. And LEDs should be used within 7 days after opening the package.

**Reliability Test Items Conditions**

Classification	Test Item	Test Conditions	Test hours	Result
Endurance Test	Opertion Life	Connect with a power If=10mA Ta=Under room temperature	1000Hrs	0/20
	Hige Temperature High Humidity	Ta= +65°C±5°C RH=90%-95%	240Hrs	0/20
	Hige Temperature Storage	High Ta= +85°C±5°C	1000Hrs	0/20
	Low Temperature Storage	Low Ta=-35°C±5°C Test time=1000hrs	1000Hrs	0/20
Environmental Test	Temperature Cycling	-45°C ~+105°C 15min 5min 15min	300 Cycles	0/20
	Thermal Shock	-35°C ~±5°C ~+85°C ~±5°C 5min 10sec 5min	300 Cycles	0/20
	Solder Resistance	Preheating: 120°C-150°C,within 2 minutes. Operation heating : 260°C(Max.),within5 seconds(Max.)	5Cycles	0/20

**Judgment criteria of fialure for the reliability**

Measuring items	Symbol	Measuring conditions	Judgment criteria for failure
Forward voltage	V <sub>F</sub> (V)	I <sub>F</sub> =10mA	Over U×1.2
Rvevrse current	I <sub>R</sub> (μA)	V <sub>R</sub> =5V	Over U×2
Luminous intensity	I <sub>v</sub> (mcd)	I <sub>F</sub> =10mA	Below S×0.5

Note: 1.U means the upper limit of specified characteristics. S means initial value.

2.Meansurement shall be taken between 2 hours after the test pieces have been returned to normal ambient cnditions after completion of each test.